

WHAT IS CLAIMED IS:

1. An oil-impregnated sintered sliding bearing formed of a porous iron-based sintered alloy with quenched structure and usable under a surface pressure of 6 kgf/mm² (58.8 MPa) or higher and at a sliding speed of 2 to 5 cm/s, in which a plurality of parallel ridge-and-groove lines having a height difference of 2 to 12.5 µm, extending in circumferential direction and forming a wavy surface in axial direction are formed by boring the bearing surface of said bearing, thereby the outer layer of said bearing surface being densified to the depth of 10 to 60 µm to block up the pore openings to 1 to 10% by area.
2. The oil-impregnated sintered sliding bearing as claimed in Claim 1, wherein said sintered alloy is formed of iron-carbon-based alloy matrix containing martensitic structure and dispersion of copper phases and the content of copper in said alloy is 15 to 25% by mass and the open porosity is 15 to 28%.
3. The oil-impregnated sintered sliding bearing as claimed in Claim 1, wherein pore openings are exposed in the bearing surface and its adjacent area by the initial contact of the sliding with an axis under radial loads and the amount of said exposed pore openings is larger than the pore openings in other area of bearing surface.
4. The oil-impregnated sintered sliding bearing as claimed in Claim 1, wherein said sliding bearing is used for joints of a hydraulic excavator of a construction machine or joints for supporting the arm of a crane.